Masters, in his "Vegetable Teratology," supplying quite a paragraph upon the subject of "Plurality of embryos in Quercus."

Since the normal number of ovules in the oak ovary is six, it is not so very wonderful that more than one of these should occasionally be fertilized and mature into seeds, perfect in all their parts, though abnormal in shape. It does seem odd, however, that such a large number of these abnormal fruits should be produced by one or two trees at one time.

MARYLAND AGRICULTURAL COLLEGE, College Park, Maryland.

THE NORTH AMERICAN REPRESENTATIVE OF ARENARIA CILIATA.

M. L. FERNALD.

Arenaria cylindrocarpa, n. sp., perennis dense vel laxe caespitosa, ramis filiformibus humifusis, ramulis adscendentibus 1–15 cm. altis puberulis remote foliatis 1–4-floris; foliis imbricatis vel remotis lanceolatis vel oblanceolatis vel oblongis subacutis glabris carnulosis siccis obsolete uninerviis 2–10 mm. longis, axilis haud vel rare fasciculigeris; pedicellis puberulis 2–30 mm. longis; calyce cylindrico basi rotundato 3–5 mm. longo fructifero 2–2.5 mm. diametro, sepalis oblongis obtusis vel subacutis enerviis vel obsolete uninerviis ad capsulam arcte adpressis; petalis anguste oblongis 5–7-nerviis calycem vix aequantibus; antheris carneis; capsulis cylindricis calycem longioribus 4.5–5.5 mm. longis olivaceis vel brunneis; seminibus reniformibus 0.6–0.7 mm. longis brunneis nitidis obsolete rugulosis.

Perennial, densely or loosely caespitose; branches filiform, forming close creeping mats; branchlets ascending, 1–15 cm. high, puberulent, remotely leafy, 1–4-flowered: leaves imbricated or remote, lanceolate, oblanceolate or oblong, subacute, glabrous, thickish, when dry obscurely 1-nerved, 2–10 mm. long; the axils rarely if ever bearing small fascicles: pedicels puberulent, 2–30 mm. long: calyx cylindric, rounded at base, 3–5 mm. long, in fruit 2–2.5 mm. in diameter; sepals oblong, obtuse or subacute, nerveless or obscurely 1-nerved, closely appressed to the capsule: petals narrowly oblong, 5–7-nerved, barely equaling the calyx: anthers flesh-colored: capsules cylindric, exceeding the calyx, 4.5–5.5 mm. long, olive or brown: seeds reniform, 0.6–0.7 mm. long, brown, shining, obscurely rugulose.— A. ciliata, var. humifusa Robinson, Proc. Am. Acad. xxix. 292 (1894) and in Gray, Syn. Fl. i.

pt. 1, 240 (1895), not (Wahlenb.) Hartm. Skand. Fl. ed. 4, 141 (1843). A. ciliata Britton in Britton & Brown, Ill. Fl. ii. 31, fig. 1500 (1897), not L. Sp. Pl. 425 (1753).—On serpentine, rarely limestone, and possibly other rocks, Labrador, Newfoundland, Quebec and British Columbia. Labrador: Ramah, August 20-24, 1897, J. D. Sornborger, no. 126; near Hebron, Mentzel. Newfoundland: serpentine tablelands, altitude about 380 m., Bonne Bay, August 27, 1910, Fernald & Wiegand, no. 3354; serpentine and magnesian limestone barrens, northeastern bases and slopes of Blomidon ("Blow-me-down") Mountains, July 24, 1910, August 20, 1910, Fernald & Wiegand, nos. 3352, 3352a; "field," Serpentine (or Coal) River, July 16, 1896, Waghorne; dry limestone barrens, upper slopes and tablelands, altitude 200-300 m., Table Mountain, Port à Port Bay, August 16, 1910, Fernald & Wiegand, no. 3353. Quebec: crevices and talus of serpentine, altitude 700-1100 m., Mt. Albert, Gaspé County, July 26 and August 1 and 2, 1881, J. A. Allen, August 12, 1905, Fernald & Collins, no. 76 (TYPE in Gray Herb.), July 23 and 25, 1906, Fernald & Collins, nos. 448, 449, 453. British Columbia: boggy slopes, Silver City, August 11, 1885, J. Macoun; "summit of Rocky Mountains," August 14, 1890, J. Macoun.

Confused by American botanists with Arenaria norvegica Gunn. Fl. Norv. ii. 144, no. MC, t. 9, figs. 7-9 (1772) = A. ciliata, var. norvegica Hartm. Skand. Fl. ed. 3, 105 (1838) = A. ciliata, var. humifusa Hartm. l. c. ed. 4, 141 (1843); also with A. ciliata L. Sp. Pl. 425 (1753); but differing from each of those European plants in many characters. In both A. norvegica and A. ciliata the leaves are more obviously nerved and even those of the flowering branches usually subtend small axillary fascicles, and in A. ciliata the leaves are strongly ciliate. In both A. norvegica and A. ciliata the calyx is campanulate to hemispherical, in fruit 3-4 mm. in diameter; and the sepals are oval, acuminate, and usually strongly nerved, those of A. ciliata often ciliate at base. In both the European species the petals are oval and distinctly longer than the sepals; and both have ebonyblack seeds, those of A. norvegica coarsely rugose, of A. ciliata distinctly but more finely rugose.

GRAY HERBARIUM.

Vol. 16, no. 181, including pages 1 to 20, and plate 106, was issued 2 January, 1914.